LISTING OF THE CLAIMS

1. (Currently Amended) A cable modem channel scanning and acquisition method comprising:

performing a fast scan of each channel in a list of candidate channels for supporting cable modem services, the fast scan including the steps of

identifying potentially valid channels by considering a first operating state of the cable modem; and

attempting to acquire at least one potentially valid channel that has been identified by the fast scan; and,

in response to not acquiring at least one valid channel ~~if a channel is not acquired~~ during the fast scan, performing a slow scan of each channel in the list, the slow scan of each channel in the list including the steps of

~~wherein the fast scan step comprises considering a first single operating state of a first component of the cable modem that might indicate the presence of a valid channel without channel power measurement and, if this operating state of the cable modem does not indicate the presence of a valid channel, moving on to scan the next channel in the list~~,

~~wherein the slow scan~~ identifying potentially valid channels by considering[[s]] a plurality of additional operating states ~~of a presence of a corresponding plurality of components~~ of the cable modem; and ~~that might indicate the presence of a valid channel without channel power measurement~~

attempting to acquire at least one potentially valid channel that has been identified by the slow scan.

2. (Canceled)

3. (Currently Amended) A method as claimed in claim 1, wherein the first ~~single~~ operating state is AGC lock state.

4. (Currently Amended) A method as claimed in claim 1, wherein the first channel considered is the last known good channel, and wherein, during the same acquisition attempt, the method periodically returns to and attempts to acquire the last known good channel.

5. (Original) A method as claimed in claim 4, wherein the frequency of attempts to acquire the last known good channel is determined by a programmable channel hop depth.

6. (Original) A method as claimed in claim 1, wherein the method first attempts to acquire channels on a golden list of channels that are likely to support cable modem services.

7. (Original) A method as claimed in claim 6, wherein the golden list is adaptively updated by adding the previous last known good channel to the golden list whenever the last known good channel is updated.

8. (Original) A method as claimed in claim 6, wherein the method does not attempt to acquire channels on a black list of channels that are not likely to support cable modem services.

9. (Original) A method as claimed in claim 8, wherein the method does not attempt to acquire channels outside the range of the applicable frequency plan.

10. (Original) A method as claimed in claim 9, and comprising an initial scanning and acquisition procedure performed prior to first registration of the modem wherein channels on the black list and outside the range of the applicable frequency plan are scanned, but are not scanned thereafter.

11. (Currently Amended) The method as claimed in claim 1, wherein the slow scan step comprises considering both the first ~~single~~ operating state and a second ~~single~~ operating

state of the cable modem, wherein the second operating state ~~might~~ indicates the presence of ~~the~~ a valid channel and is different from the first ~~single~~ operating state.

12. (Previously presented) The method as claimed in claim 1, wherein the slow scan scans at a slower speed than the fast scan to acquire the channel.

13. (Currently Amended) The method as claimed in claim 1, wherein the plurality of additional operating states of the modem ~~corresponding components~~ includes a lock state of a demodulator and a PLL lock of a PLL.

14. (Previously presented) The method as claimed in claim 1, wherein the slow scan mode scans the plurality of operating states even when the first operating state does not indicate the presence of a valid channel.